

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A data conversion system, comprising:

a terminal device belonging to a first communication network;

a server device belonging to a second communication network having a protocol different from that of said first communication network;

a protocol conversion device provided at a connection point between said first communication network and said second communication network for conducting protocol conversion;

a storage unit which stores constraint information peculiar to said terminal device and type information of contents supported by said terminal device added to a request from said terminal device for obtaining contents from said server device; and

a data conversion unit which converts said contents obtained from said server device into data based on said type information of contents supported by said terminal and said constraint information peculiar to said terminal device stored in said storage unit,

wherein said data conversion unit determines whether conversion to contents supported by said terminal device is necessary and whether conversion of said contents obtained from said server device is possible based on said type information of contents supported by said terminal device,

when conversion of said contents obtained from said server device is necessary but conversion to the contents supported by said terminal device is impossible, said data conversion unit deletes said contents obtained from said server device,

when conversion of said contents obtained from said server device is necessary and conversion to the contents supported by said terminal device is possible, said data conversion unit converts said contents obtained from said service device to converted contents supported by said terminal device,

said data conversion unit determines whether one of the converted contents supported by said terminal device and said contents supported by said terminal device are image data,

when said one of said contents supported by said terminal device and said converted contents supported by said terminal device are not image data, said data conversion unit returns said one of said contents supported by said terminal device and said converted contents supported by said terminal device to said protocol conversion device without further conversion,

when said one of said contents supported by said terminal device and said converted contents supported by said terminal device are image data, said data conversion unit determines whether said constraint information peculiar to said terminal device exists in said storage unit,

when said constraint information peculiar to said terminal device exists, said data conversion unit converts said one of said contents supported by said terminal device and said converted contents supported by said terminal device to converted image contents based on said constraint information peculiar to said terminal device and returns said converted image contents to said protocol conversion device,

when no constraint information peculiar to said terminal device exists, said data conversion unit returns said one of said contents supported by said terminal device and said converted contents supported by said terminal device to said protocol conversion device without conversion.

2. (canceled)

3. (previously presented) The data conversion system as set forth in claim 1, wherein

said data conversion unit is provided at said protocol conversion device.

4. (canceled)

5. (previously presented) The data conversion system as set forth in claim 1, wherein

said protocol conversion device includes said data conversion unit and said storage unit.

6. (previously presented) The data conversion system as set forth in claim 1, wherein

said data conversion unit is provided at said server device.

7. (currently amended) The data conversion system as set forth in claim 1, wherein

said protocol conversion device transmits said request received from said terminal device and said constraint information peculiar to said terminal device and said type information of contents supported by said terminal device added to said request to said server device, and

said protocol conversion device and said server device include said storage unit and said data conversion unit.

8. (original) The data conversion system as set forth in claim 1, wherein

said constraint information peculiar to said terminal device includes at least one of size information of images and gradation information of images.

9. (original) The data conversion system as set forth in claim 1, wherein

said first communication network is a communication network for portable information terminals and said second communication network is the Internet.

10. (currently amended) A data conversion method in a data conversion system including a terminal device belonging to a first communication network, a server device belonging to a second communication network having a protocol different from that of said first communication network and a protocol conversion device provided at a connection point between said first communication network and said second communication network for conducting protocol conversion, comprising the steps of:

storing constraint information peculiar to said terminal device and type information of contents supported by said terminal device added to a request from said terminal device for obtaining contents from said server device;

determining whether conversion to contents supported by said terminal device of said contents obtained from said server device is necessary and whether conversion of said contents obtained from said server device is possible based on said type of information of contents supported by said terminal device;

deleting said contents obtained from said server device, when conversion of said contents obtained from said server device is necessary, but conversion to the contents supported by said terminal device is impossible;

converting the contents supported by said terminal device to converted contents, when conversion of said contents obtained from said server device is necessary and conversion to the contents supported by said terminal device is possible;

determining whether one of the converted contents and said contents supported by said terminal device are image data;

returning said one of said contents supported by said terminal device and said converted contents to said protocol conversion device without conversion based on said constraint information peculiar to said terminal device, when said one of said contents supported by said terminal device and said converted contents are not image data;

determining whether said constraint information exists in said storage unit, when said one of said contents supported by said terminal device and said converted contents are image data;

converting said one of said contents supported by said terminal device and said converted contents based on said constraint information peculiar to said terminal device to converted image contents and returning said converted image contents to said protocol conversion device, when said constraint information peculiar to said terminal device exists; and

returning said one of said contents supported by said terminal device and said converted contents to said protocol conversion device without conversion, when no constraint information peculiar to said terminal device exists.

11.(canceled)

12. (original) The data conversion method as set forth in claim 10, wherein

said constraint information peculiar to said terminal device includes at least one of size information of images and gradation information of images.

13. (original) The data conversion method as set forth in claim 10, wherein

said first communication network is a communication network for portable information terminals and said second communication network is the Internet.

14. (currently amended) A computer readable memory which stores a data conversion program for executing data conversion in a data conversion system including a terminal device belonging to a first communication network, a server device belonging to a second communication network having a protocol different from that of said first communication network and a protocol conversion device provided at a connection point between said first communication network and said second communication network for conducting protocol conversion,

said data conversion program comprising the functions of:

storing constraint information peculiar to said terminal device and type information of contents supported by said terminal device added to a request from said terminal device for obtaining contents from said server device;

determining whether conversion to contents supported by said terminal device of said contents obtained from said server device is necessary and whether conversion of said contents obtained from said server device is possible based on said type information of contents supported by said terminal device;

deleting said contents obtained from said server device, when conversion of said contents obtained from said server device is necessary, but conversion to the contents supported by said terminal device is impossible;

converting the contents supported by said terminal device to converted contents, when conversion of said contents obtained from said server device is necessary and conversion to the contents supported by said terminal device is possible;

determining whether one of the converted contents and said contents supported by said terminal device are image data;

returning said one of said contents supported by said terminal device and said converted contents to said protocol conversion device without conversion based on said constraint information, when said one of said contents supported by said terminal device and said converted contents are not image data;

determining whether said constraint information peculiar to said terminal device exists in said storage unit, when said one of said contents supported by said terminal device and said converted contents are image data;



converting said one of said contents supported by said terminal device and said converted contents based on said constraint information peculiar to said terminal device to converted image contents and returning said converted image contents to said protocol conversion device, when said constraint information peculiar to said terminal device exists; and

returning said one of said contents supported by said terminal device and said converted contents to said protocol conversion device without conversion, when no constraint information peculiar to said terminal device exists.

15. (canceled)

16. (original) The computer readable memory which stores a data conversion program as set forth in claim 14, wherein

said constraint information peculiar to said terminal device includes at least one of size information of images and gradation information of images.

17. (original) The computer readable memory which stores a data conversion program as set forth in claim 14, wherein

said first communication network is a communication network for portable information terminals and said second communication network is the Internet.

18-25. (canceled)